

# **DART SERVICE INSTRUCTION**

**TO AMEND IIN-D350-822 REV. G OR LATER APPROVED REVISION  
AND ICA-D350-822 REV. 5 OR LATER APPROVED REVISION**

REF. TCCA STC: SH14-14  
REF. ANAC STC: 2014S07-11  
REF. FAA STC: SR03538NY  
REF. JCAB STC: STC-372-OSA/STC-371-OSA  
REF. EASA STC: 10056574

## **1.0 INTRODUCTION**

It has come to Dart's attention that some customers are experiencing wear of the D4693-1 Flex Hose on the D350-822-011 PA100 PUREair System because of rubbing against the D5090-041 Duct Assembly on aircraft with Dual Hydraulics.

## **2.0 PURPOSE**

The purpose of this Dart Service Instruction (DSI) is to allow the installation of the D5526-1/-3 Hose Protectors to prevent premature wear of D4693-1 Flex Hose on the D350-822-011 PA100 PUREair System.

## **3.0 PROCEDURE**

Additional B54320-A5 washers may be installed under the nuts to ensure 1.5-4 threads in safety on the bolts. Although not generally necessary, it is also acceptable to replace the LN9038-05016 bolts with longer or shorter LN9038-05016 bolts, if required.

- 3.1 Remove Q21310 Transition Duct Assembly with the D5090-041 Duct Assembly from AS350/EC130 engine cowl per ICA-D350-822.
- 3.2 Remove existing fasteners at the location where the D5526-1/-3 Upper/Lower Hose Protectors will be positioned, as shown in Figures 1 and 2. Discard fasteners.
- 3.3 Temporarily position the D5526-3 Lower Hose Protector onto the D5090-041 Duct Assembly and trim the small flange edge that interferes with D5526-3 as shown in Figure 3 (small hatched area).
- 3.4 Position the D5526-3 Lower Hose Protector flat on the D5090-041 Duct Assembly flange, and then align both edges of the D5526-3 with the edges of the D5090-041 flanges as shown in Figure 3. Trace the D5526-3 outside edge onto the top and bottom flanges of D5090-041 as shown in Figure 3.
- 3.5 Trim flanges of the D5090-041 Duct Assembly and Q21310 Transition Duct Assembly to the markings created at step 3.4.
- 3.6 Position the D5526-1/-3 Hose Protectors onto the D5090-041 Duct Assembly and Q21310 Transition Duct Assembly. Transfer  $\phi 0.201$  (#7 drill) holes from D5090-041 Duct Assembly to the D5526-1/-3 Upper/Lower Hose Protectors as shown in Figure 3.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

**APPROVED**

BY:   
D. SHEPHERD (DE # 02)

DATE: 18.01.12  
CERT. NO.: SH14-14  
ISSUE NO.: 2

APPROVED

A	NEW ISSUE; REF. PAR17-587	RF	18.01.12
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9793	SHEET 1 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	HOSE PROTECTOR INST.	NTS
DATE	18.01.12	COPYRIGHT © 2018 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

3.7 Any/all of the following adjustments may be made to the installation in order to help the D5526-1/-3 Upper/Lower Hose Protector fit snugly:

- a) Washers may be trimmed if they interfere with the edge of the D5526-1/-3 Upper/Lower Hose Protector.
- b) The mating surface of the D5526-1/-3 Upper/Lower Hose Protector may be relieved to provide clearance for rivet heads/tails.
- c) The length of the D5526-1/-3 Upper/Lower Hose Protector may be trimmed while maintaining proper edge distance for the fasteners.

3.8 Deburr and touch up the edge of the trimmed parts with primer and paint in accordance with the Aircraft Maintenance Manual prior to re-installation. Seal the faying surface with Proseal 820 or equivalent.

3.9 Install D5526-1/-3 Upper/Lower Hose Protectors using 2x LN9038-05016 bolt, 4x B54320-A5 washers and LN938-05 nuts as shown in Figure 3. Torque fasteners 27-35 in-lb (3-4 N-m).

3.10 Install Q21310 Transition Duct Assembly with the modified D5090-041 Duct Assembly into the AS350/EC130 engine cowl in accordance with ICA-D350-822.

3.11 Update Aircraft Logbook to indicate installation of the DSI 9793-011 Hose Protector kit.

#### **4.0 WEIGHT AND BALANCE**

This DSI has a negligible effect on Weight & Balance.

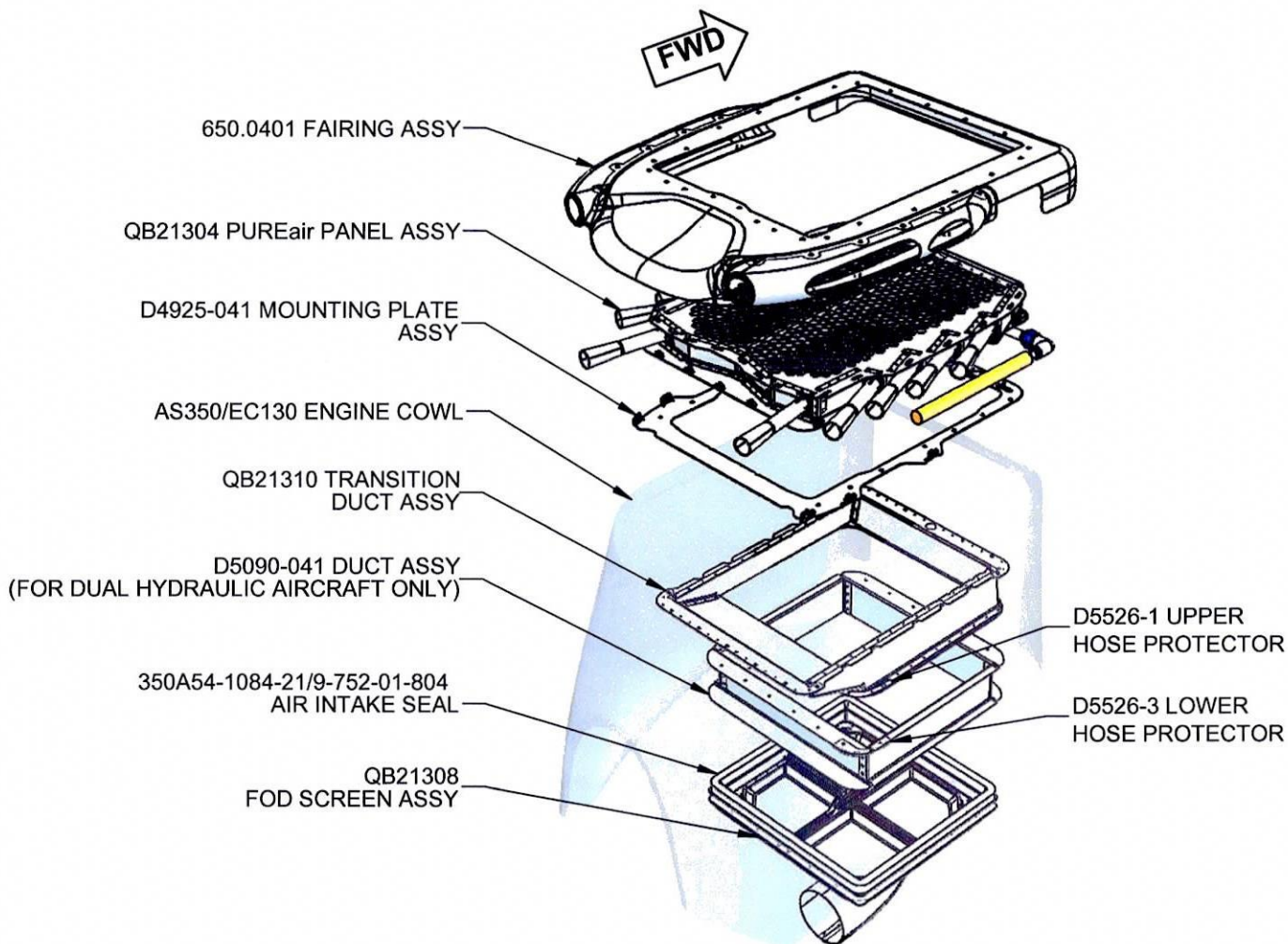
#### **5.0 PARTS LIST**

QTY -011	PART NUMBER	DESCRIPTION
X	DSI 9793-011	HOSE PROTECTOR KIT
1	D5526-1	HOSE PROTECTOR
1	D5526-3	HOSE PROTECTOR
4	BS4320-A5	WASHER
2	LN9038-05016	BOLT
2	LN9348-05	NUT

APPROVED

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9793	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	HOSE PROTECTOR INST.	NTS
DATE	18.01.12	COPYRIGHT © 2018 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

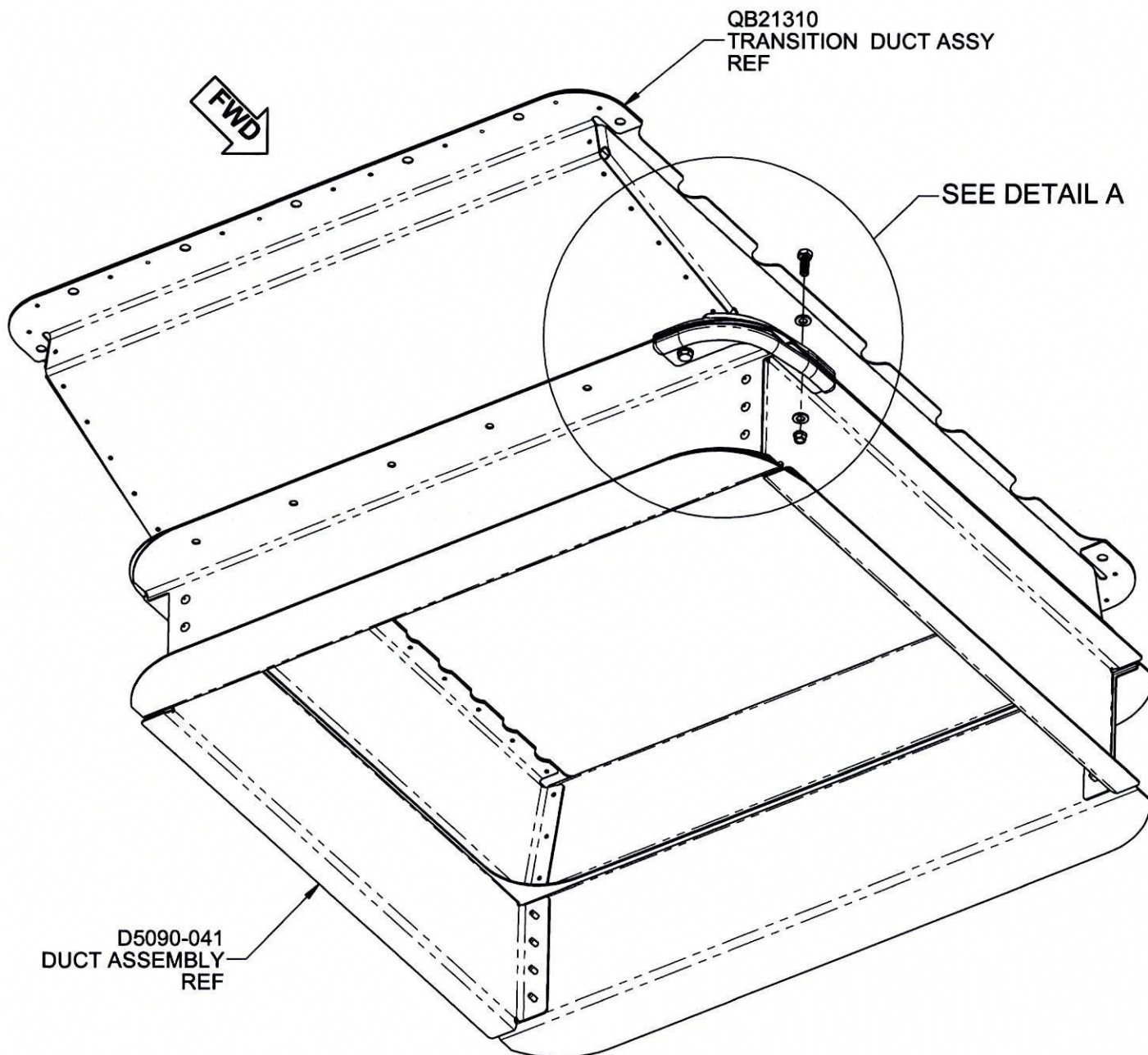




**Figure 1- PA100 PUREair Installation (D350-822-011)**

APPROVED

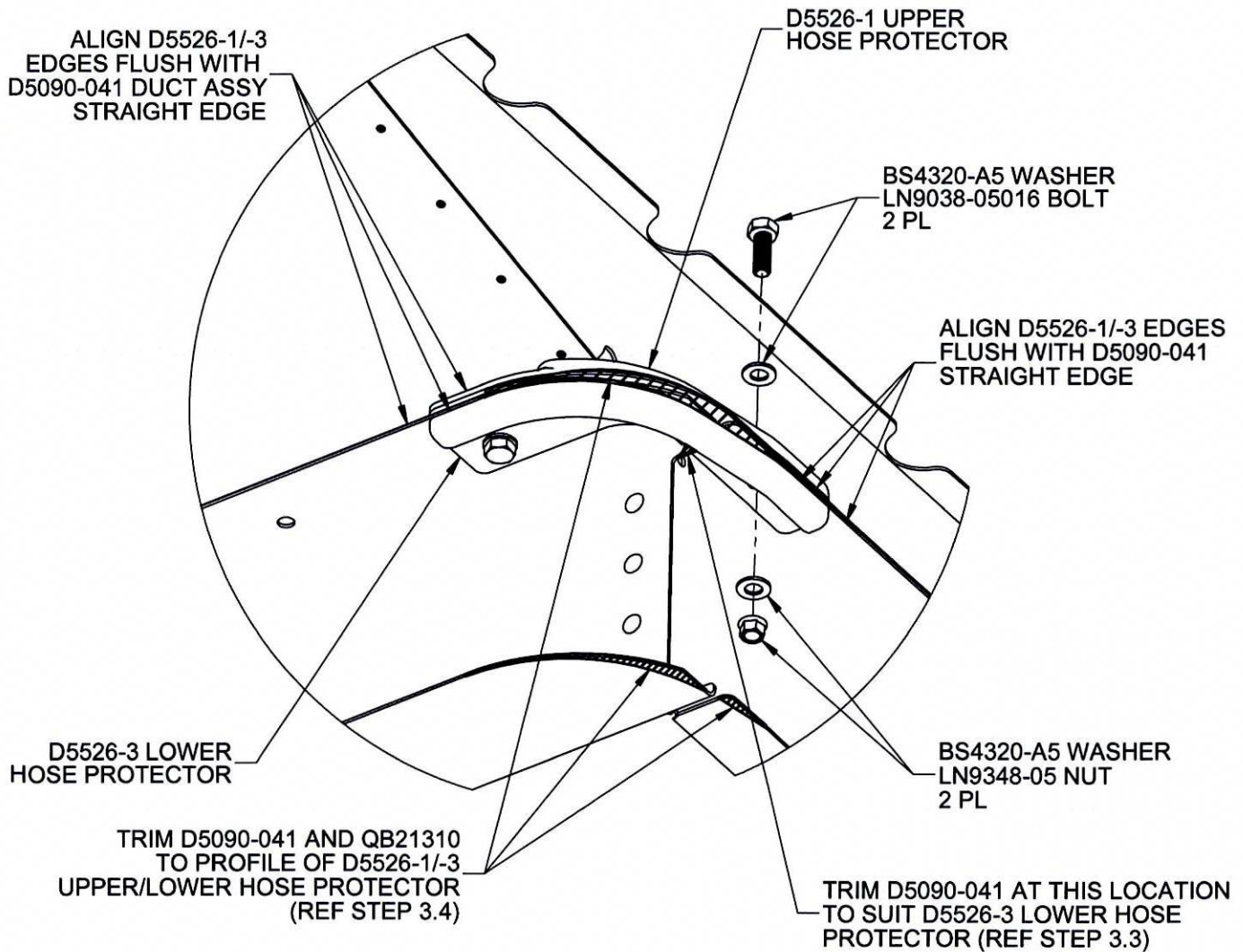
DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9793	SHEET 3 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	HOSE PROTECTOR INST.	NTS
DATE	18.01.12	COPYRIGHT © 2018 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



**Figure 2- D5526-1/-3 Upper/Lower Hose Protector Installation**

APPROVED

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9793</b>	SHEET 4 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>HOSE PROTECTOR INST.</b>	NTS
DATE	<b>18.01.12</b>	COPYRIGHT © 2018 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



### DETAIL A

**Figure 3- D5526-1/-3 Upper/Lower Hose Protector Installation**

APPROVED

DESIGN	RF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	HS	DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9793</b>	SHEET 5 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>HOSE PROTECTOR INST.</b>	NTS
DATE	18.01.12	COPYRIGHT © 2018 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	